

Core 201LN/4372

General characteristics

This low-nickel stainless steel also has properties approaching Core 301/4310, but has a higher strength than Core 201/4372. It hardens more quickly due to its higher work hardening coefficient.

Typical applications

- · Railroad freight cars
- Truck trailers
- Coal handling
- Bulk transport equipment

Products & dimensions

Cold rolled products, available dimensions (mm)

| | | Coil / Strip | | Plate / Sheet | |
|----------------|---|--------------|----------|---------------|----------|
| Surface finish | | Thickness | Width | Thickness | Width |
| 2B | Cold rolled, heat treated, pickled, skin passed | 0.63-3.57 | 914-1524 | 0.63-3.57 | 914-1524 |
| 2D | Cold rolled, heat treated, pickled | 0.63-2.78 | 914-1524 | 0.63-2.78 | 914-1524 |
| 2K | Satin finish | 0.63-3.05 | 914-1524 | 0.63-3.05 | 914-1524 |

Continous hot rolled products, available dimensions (mm)

| | | Coil / Strip | | Plate / Sheet | | |
|----------------|---|-----------------------------------|-----------|---------------|-----------|----------|
| Surface finish | | Thickness | Width | Thickness | Width | |
| 1 | D | Hot rolled, heat treated, pickled | 2.54-9.52 | 914-1219 | 2.54-9.52 | 914-1219 |

Chemical composition

The typical chemical composition for this grade is given in the table below, together with composition limits given for the product according to different standards. The required standard will be fully met as specified on the order.

The chemical composition is given as % by mass.

| | С | Mn | Cr | Ni | Мо | N | Other |
|---------|-------|-----|------|-----|----|------|---------|
| Typical | 0.026 | 6.6 | 16.2 | 4.0 | | 0.16 | Cu:0.75 |

Corrosion resistance

| Pitting corros | ion resistance | Crevice corrosion resistance | | |
|----------------|----------------|------------------------------|--|--|
| PRE | CPT | ССТ | | |
| 19 | | | | |

Pitting Resistance Equivalent (PRE) is calculated using the following formula: $PRE = %Cr + 3.3 \times %Mo + 16 \times %N$ Corrosion Pitting Temperature (CPT) as measured in the Avesta Cell (ASTM G 150), in a 1M NaCl solution (35,000 ppm or mg/l chloride ions).

Critical Crevice Corrosion Temperature (CCT) is obtained by laboratory tests according to ASTM G 48 Method F

Mechanical properties

Physical properties

| Density | Modulus of elasticity | Thermal exp. at 100 °C | Thermal conductivity | Thermal capacity | Electrical resistance | Magnetizable |
|--------------------|-----------------------|---------------------------|----------------------|------------------|--------------------------|--------------|
| kg/dm ³ | GPa | 10 ⁻⁶ /°C | W/m°C | J/kg°C | μΩm | |
| 7.8 | 200 | | 15 | | 0.7 | No |

Fabrication

More detailed information concerning welding procedures can be obtained from the Outokumpu Welding Handbook, available from our sales offices.

Standards & approvals

Standard Designation

Contacts & Enquiries

Contact your nearest sales office

www.outokumpu.com/contacts

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